

March 20, 2017 03:13 PM GMT

Zhaojin Mining Industry

Snippets from results briefing

Stock Rating
Overweight

Industry View
Attractive

Price Target
HK\$8.24

2017 guidance - flat own volume: The company guided for flat YoY self-mined gold production at 599.2koz. However, it expects processing and smelting gold output to increase by 10.5% YoY to 558.2koz.

Unit cost under control: Overall unit cost increased by about Rmb3/g (2.5% YoY) to Rmb138.4/g in 2016, mainly on higher labor costs and deeper mining. However, that was partially offset by increased recovery rates during concentrate selection after technical upgrades. For 2017, management aims to maintain flat cost.

Capex - exploring M&A opportunities: 2016 actual capex was Rmb1.24bn, 25% lower YoY due to some production line upgrades completed in 2015. Management expects 2017 capex at Rmb1.45bn, +17% YoY, of which, Rmb500mn is budgeted for acquisitions and exploration. Management said there was no fixed target, but this is a general acquisition budget. They said the company is exploring potential opportunities worldwide.

Haiyu project update: Zhaojin said its new mine Haiyu is continuing to be developed. It has achieved utility connections and ground engineering, and now is going through regulatory procedures, such as environmental assessment and license applications. With gold veins 300m under a seabed that is covered by a shallow 70-80m of water, management expects limited technical difficulty, similar to normal underground mines. Management expects the mine to commence production by late 2019, with designed capacity of ~15t/yr. With over 4g/t ore grade, gross unit production cost at Haiyu project should be lower than other mines in Zhaoyuan (which are at 132g/t). So far, Rmb1bn in capex has been invested in the project, with a further Rmb4-4.5bn planned during 2017-19. In 2017, Zhaojin expects to invest Rmb300-400mn capex in Haiyu, as the project is mainly working through administration issues this year. Capex for Haiyu will pick up in 2018-19.

A-share IPO planned: Although no specific timetable as been introduced yet, Zhaojin continues to push forward on its A-share IPO. Management has indicated this is a top priority.

Hedging practice: Zhaojin said it will hedge no more than 30% of self-produced gold to smooth out gold price fluctuations. Due to hedging, Zhaojin's realized ASP is about Rmb3/g lower than annual average gold price on SHFE (Shanghai Future Exchange). Zhaojin's gold leasing position is fully hedged.

MORGAN STANLEY ASIA LIMITED+

Sara Chan
EQUITY ANALYST
Sara.Chan@morganstanley.com +852 2848-5292

Rachel L Zhang
EQUITY ANALYST
Rachel.Zhang@morganstanley.com +852 2239-1520

Han Fu
EQUITY ANALYST
Han.Fu@morganstanley.com +852 2239-7555

Lindsay Hu
EQUITY ANALYST
Lindsay.Hu@morganstanley.com +852 2239-7810



Morgan Stanley appreciates your support in the 2017 Institutional Investor's All-Asia Research Team Survey.
[Request your ballot](#)

Zhaojin Mining Industry (1818.HK, 1818 HK)

Greater China Materials / China

Stock Rating	Overweight
Industry View	Attractive
Price target	HK\$8.24
Up/downside to price target (%)	9
Shr price, close (Mar 20, 2017)	HK\$7.53
52-Week Range	HK\$10.02-5.61
Sh out, dil, curr (mn)	2,966
Mkt cap, curr (mn)	US\$2,878
EV, curr (mn)	US\$4,737
Avg daily trading value (mn)	US\$9.1

Fiscal Year Ending	12/15	12/16e	12/17e	12/18e
Revenue, net (Rmb mn)	5,887	6,092	6,457	6,723
EBITDA (Rmb mn)	1,789	2,259	2,587	2,840
ModelWare net inc (Rmb mn)	308	402	512	555
ModelWare EPS (Rmb)	0.10	0.14	0.17	0.19
Consensus EPS (Rmb)§	0.14	0.18	0.24	0.28
P/E	35.3	44.1	38.8	35.8
EV/EBITDA	13.3	14.1	13.6	12.5
P/BV	1.0	1.6	1.8	1.7
ROE (%)	3.6	3.7	4.7	4.9
Div yld (%)	1.1	0.8	0.9	1.0

Unless otherwise noted, all metrics are based on Morgan Stanley ModelWare framework
§ = Consensus data is provided by Thomson Reuters Estimates
e = Morgan Stanley Research estimates

Morgan Stanley does and seeks to do business with companies covered in Morgan Stanley Research. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of Morgan Stanley Research. Investors should consider Morgan Stanley Research as only a single factor in making their investment decision.

For analyst certification and other important disclosures, refer to the Disclosure Section, located at the end of this report.

+ = Analysts employed by non-U.S. affiliates are not registered with FINRA, may not be associated persons of the member and may not be subject to NASD/NYSE restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

2016 in review

Impairment & effective tax rate: Impairment losses increased, although the gold price increased YoY. This was mainly due to impairments on 3 mine projects, including exploration in Xinjiang which has not yielded any notable reserve increase. According to conservative accounting practices management has recognized impairment losses. As such impairment is not tax deductible, effective tax rate spiked to 46% in 2016 from 23-28% during 2008-2015.

Rmb105mn administrative expense on employee stock program: Management guided that a Rmb105mn administrative expense was recognized due to employee stock ownership program (ESOP). The program was announced at the 2015 board meeting, and actual expense recognition is based on when Zhaojin's stock price was over HK\$9.

Lower finance costs helped by interest rates: The company's finance expenses dropped on lower interest rates. The interest rate on its corporate bonds have been reduced from 4.6% to 3.89%, while interest for gold leasing in 2016 was as low as 3.2-3.3%. Zhaojin's debt composition is as follows: 1) gold leasing 20-30%; 2) bank borrowing 10%; 3) corporate bonds 40%.

Copper segment reported a loss in 2016 due to subdued copper price. The company proactively reduced copper output to protect reserves in the low price environment.

Recent reports:

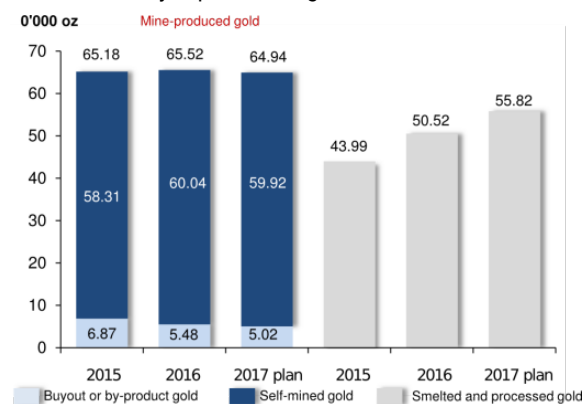
[Zhaojin Mining : 2016 results: gross profit beat, net profit miss \(19 Mar 2017\)](#)

[Greater China Materials: Correction: Improved Demand Outlook + Supply Cut Lead to Re-Rating \(14 Mar 2017\)](#)

[metal&ROCK: The Price Deck – 2Q 2017 \(13 Mar 2017\)](#)

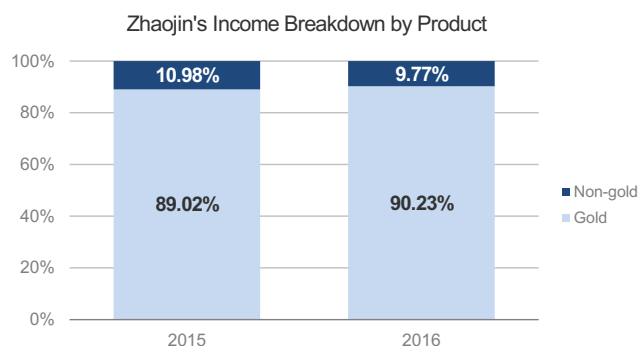
Exhibits

Exhibit 1: Zhaojin - production guidance



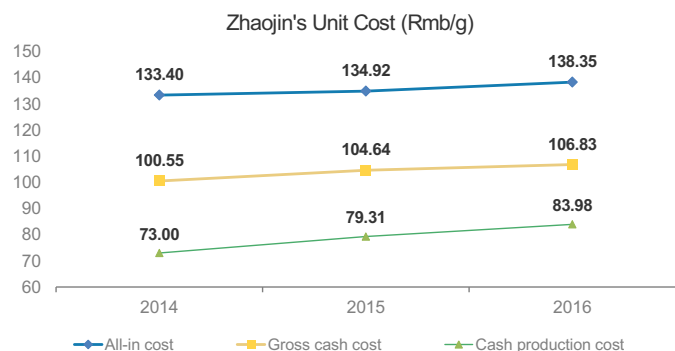
Source: Company data, Morgan Stanley Research

Exhibit 2: Zhaojin - revenue breakdown gold vs. non-gold



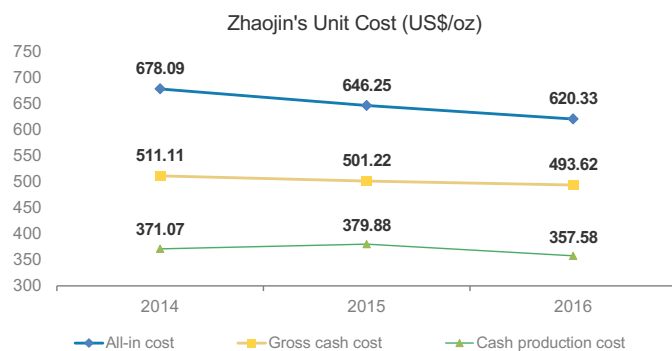
Source: Company data, Morgan Stanley Research

Exhibit 3: Zhaojin - cost trend in Rmb/g



Source: Company data, Morgan Stanley Research

Exhibit 4: Zhaojin - cost trend in USD/g



Source: Company data, Morgan Stanley Research

Exhibit 5: Zhaojin - capex breakdown

(Rmb mn)	2016 Planned	2016 Actual	Difference	2017 Plan	YoY
Gold mine acquisition and senior exploration projects	500.0	82.6	-83%	500.0	505%
Infrastructure technical upgrade	789.0	816.0	3%	700.0	-14%
Technical innovation	78.7	83.3	6%	73.1	-12%
Exploration activities	104.0	140.0	35%	82.3	-41%
Assets maintenance capex	160.7	113.2	-30%	84.4	-25%
Land leasing	10.0	6.4	-36%	7.5	17%
Total	1,642.4	1,241.6	-24%	1,447.3	17%

Source: Company data, Morgan Stanley Research

Our HK\$8.24 price target is our base case scenario value, derived using Morgan Stanley's residual income model, in which we discount our base-case earnings estimates through 2024, and then normalize them by our cost of equity of 8.5% (on a risk-free rate of 0%, a market risk premium of 7.2%, and a beta of 1.1). We assume long-term ROE of 12.0% and a steady-state revenue growth rate of 5% p.a.

Key downside risks: i) Falling gold price amid US dollar strength; ii) execution risk in new projects; iii) increased borrowings lead to higher finance costs and weigh on near-term earnings.

Disclosure Section

The information and opinions in Morgan Stanley Research were prepared or are disseminated by Morgan Stanley Asia Limited (which accepts the responsibility for its contents) and/or Morgan Stanley Asia (Singapore) Pte. (Registration number 199206298Z) and/or Morgan Stanley Asia (Singapore) Securities Pte Ltd (Registration number 200008434H), regulated by the Monetary Authority of Singapore (which accepts legal responsibility for its contents and should be contacted with respect to any matters arising from, or in connection with, Morgan Stanley Research), and/or Morgan Stanley Taiwan Limited and/or Morgan Stanley & Co International plc, Seoul Branch, and/or Morgan Stanley Australia Limited (A.B.N. 67 003 734 576, holder of Australian financial services license No. 233742, which accepts responsibility for its contents), and/or Morgan Stanley Wealth Management Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813, which accepts responsibility for its contents), and/or Morgan Stanley India Company Private Limited, regulated by the Securities and Exchange Board of India ("SEBI") and holder of licenses as a Research Analyst (SEBI Registration No. INH000001105); Stock Broker (BSE Registration No. INB011054237 and NSE Registration No. INB/INF231054231), Merchant Banker (SEBI Registration No. INM000011203), and depository participant with National Securities Depository Limited (SEBI Registration No. IN-DP-NSDL-372-2014) which accepts the responsibility for its contents and should be contacted with respect to any matters arising from, or in connection with, Morgan Stanley Research, and/or PT. Morgan Stanley Sekuritas Indonesia and their affiliates (collectively, "Morgan Stanley").

For important disclosures, stock price charts and equity rating histories regarding companies that are the subject of this report, please see the Morgan Stanley Research Disclosure Website at www.morganstanley.com/researchdisclosures, or contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY, 10036 USA.

For valuation methodology and risks associated with any recommendation, rating or price target referenced in this research report, please contact the Client Support Team as follows: US/Canada +1 800 303-2495; Hong Kong +852 2848-5999; Latin America +1 718 754-5444 (U.S.); London +44 (0)20-7425-8169; Singapore +65 6834-6860; Sydney +61 (0)2-9770-1505; Tokyo +81 (0)3-6836-9000. Alternatively you may contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY 10036 USA.

Analyst Certification

The following analysts hereby certify that their views about the companies and their securities discussed in this report are accurately expressed and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report: Sara Chan; Han Fu; Lindsay Hu; Rachel L Zhang.

Unless otherwise stated, the individuals listed on the cover page of this report are research analysts.

Global Research Conflict Management Policy

Morgan Stanley Research has been published in accordance with our conflict management policy, which is available at www.morganstanley.com/institutional/research/conflictolicies.

Important US Regulatory Disclosures on Subject Companies

As of February 28, 2017, Morgan Stanley beneficially owned 1% or more of a class of common equity securities of the following companies covered in Morgan Stanley Research: Shandong Gold Mining Co. Ltd.

In the next 3 months, Morgan Stanley expects to receive or intends to seek compensation for investment banking services from Aluminum Corp. of China Ltd., Angang Steel Company Limited, China Molybdenum, China Steel Corp., Jiangxi Copper, Lee & Man Paper Manufacturing, Tianqi Lithium Industries Inc., Zijin Mining Group.

Within the last 12 months, Morgan Stanley has received compensation for products and services other than investment banking services from China Molybdenum, China Steel Corp., Zijin Mining Group.

Within the last 12 months, Morgan Stanley has provided or is providing investment banking services to, or has an investment banking client relationship with, the following company: Aluminum Corp. of China Ltd., Angang Steel Company Limited, China Molybdenum, China Steel Corp., Jiangxi Copper, Lee & Man Paper Manufacturing, Tianqi Lithium Industries Inc., Zijin Mining Group.

Within the last 12 months, Morgan Stanley has either provided or is providing non-investment banking, securities-related services to and/or in the past has entered into an agreement to provide services or has a client relationship with the following company: China Molybdenum, China Steel Corp., Jiangxi Copper, Zijin Mining Group.

The equity research analysts or strategists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors, firm revenues and overall investment banking revenues. Equity Research analysts' or strategists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

Morgan Stanley and its affiliates do business that relates to companies/instruments covered in Morgan Stanley Research, including market making, providing liquidity, fund management, commercial banking, extension of credit, investment services and investment banking. Morgan Stanley sells to and buys from customers the securities/instruments of companies covered in Morgan Stanley Research on a principal basis. Morgan Stanley may have a position in the debt of the Company or instruments discussed in this report. Morgan Stanley trades or may trade as principal in the debt securities (or in related derivatives) that are the subject of the debt research report.

Certain disclosures listed above are also for compliance with applicable regulations in non-US jurisdictions.

STOCK RATINGS

Morgan Stanley uses a relative rating system using terms such as Overweight, Equal-weight, Not-Rated or Underweight (see definitions below). Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold and sell. Investors should carefully read the definitions of all ratings used in Morgan Stanley Research. In addition, since Morgan Stanley Research contains more complete information concerning the analyst's views, investors should carefully read Morgan Stanley Research, in its entirety, and not infer the contents from the rating alone. In any case, ratings (or research) should not be used or relied upon as investment advice. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations.

Global Stock Ratings Distribution

(as of February 28, 2017)

The Stock Ratings described below apply to Morgan Stanley's Fundamental Equity Research and do not apply to Debt Research produced by the Firm. For disclosure purposes only (in accordance with NASD and NYSE requirements), we include the category headings of Buy, Hold, and Sell alongside our ratings of Overweight, Equal-weight, Not-Rated and Underweight. Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold, and sell but represent recommended relative weightings (see definitions below). To satisfy regulatory requirements, we correspond Overweight, our most positive stock rating, with a buy recommendation; we correspond Equal-weight and Not-Rated to hold and Underweight to sell recommendations, respectively.

STOCK RATING CATEGORY	COVERAGE UNIVERSE		INVESTMENT BANKING CLIENTS (IBC)			OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC)	
	COUNT	% OF TOTAL	COUNT	% OF TOTAL IBC	% OF RATING CATEGORY	COUNT	% OF TOTAL OTHER MISC
Overweight/Buy	1148	35%	286	43%	25%	551	36%
Equal-weight/Hold	1418	43%	297	45%	21%	699	46%
Not-Rated/Hold	61	2%	8	1%	13%	8	1%
Underweight/Sell	638	20%	76	11%	12%	269	18%
TOTAL	3,265		667			1527	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months.

Analyst Stock Ratings

Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Not-Rated (NR). Currently the analyst does not have adequate conviction about the stock's total return relative to the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

Analyst Industry Views

Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.

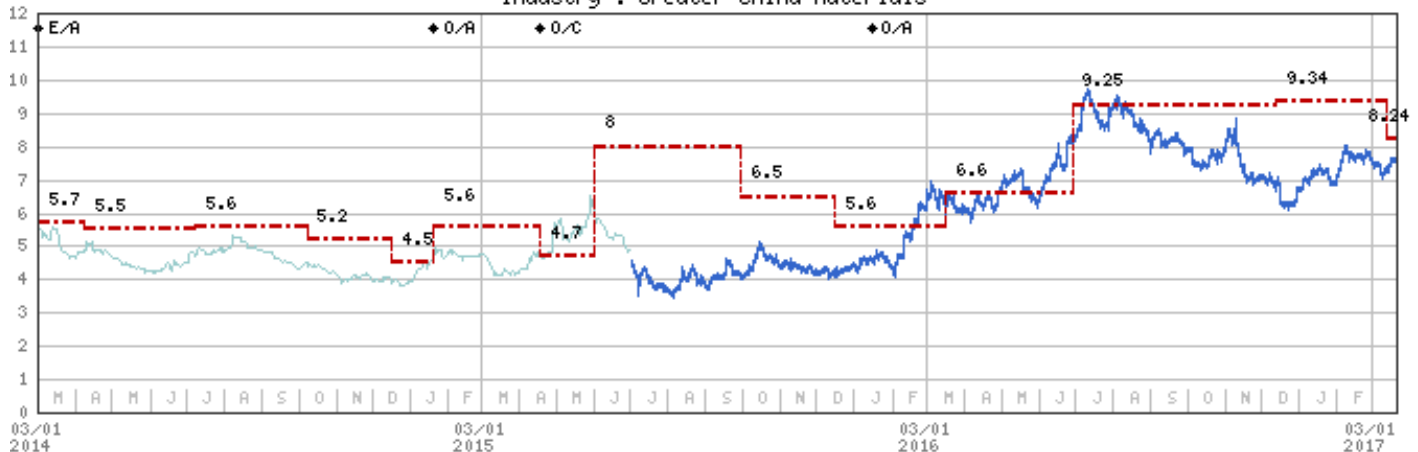
In-Line (I): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.

Cautious (C): The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.

Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

Stock Price, Price Target and Rating History (See Rating Definitions)

Zhaojin Mining Industry (1818.HK) - As of 3/20/17 in HKD
Industry : Greater China Materials



Stock Rating History: 3/1/14 : E/A; 1/20/15 : O/A; 4/17/15 : O/C; 1/15/16 : O/A

Price Target History: 1/22/14 : 5.7; 4/8/14 : 5.5; 7/8/14 : 5.6; 10/8/14 : 5.2; 12/16/14 : 4.5; 1/20/15 : 5.6; 4/17/15 : 4.7; 6/1/15 : 8; 9/30/15 : 6.5; 12/16/15 : 5.6; 3/16/16 : 6.6; 6/28/16 : 9.25; 12/13/16 : 9.34; 3/14/17 : 8.24

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target --- No Price Target Assigned (NA)
 Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) —
 Stock and Industry Ratings (abbreviations below) appear as ♦ Stock Rating/Industry View
 Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)
 Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

Effective January 13, 2014, the stocks covered by Morgan Stanley Asia Pacific will be rated relative to the analyst's industry (or industry team's) coverage.

Effective January 13, 2014, the industry view benchmarks for Morgan Stanley Asia Pacific are as follows: relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

Important Disclosures for Morgan Stanley Smith Barney LLC Customers

Important disclosures regarding the relationship between the companies that are the subject of Morgan Stanley Research and Morgan Stanley Smith Barney LLC or Morgan Stanley or any of their affiliates, are available on the Morgan Stanley Wealth Management disclosure website at www.morganstanley.com/online/researchdisclosures. For Morgan Stanley specific disclosures, you may refer to www.morganstanley.com/researchdisclosures.

Each Morgan Stanley Equity Research report is reviewed and approved on behalf of Morgan Stanley Smith Barney LLC. This review and approval is conducted by the same person who reviews the Equity Research report on behalf of Morgan Stanley. This could create a conflict of interest.

Other Important Disclosures

Morgan Stanley & Co. International PLC and its affiliates have a significant financial interest in the debt securities of Shandong Gold Mining Co. Ltd. Morgan Stanley Research policy is to update research reports as and when the Research Analyst and Research Management deem appropriate, based on developments with the issuer, the sector, or the market that may have a material impact on the research views or opinions stated therein. In addition, certain Research publications are intended to be updated on a regular periodic basis (weekly/monthly/quarterly/annual) and will ordinarily be updated with that frequency, unless the Research Analyst and Research Management determine that a different publication schedule is appropriate based on current conditions. Morgan Stanley is not acting as a municipal advisor and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Morgan Stanley produces an equity research product called a "Tactical Idea." Views contained in a "Tactical Idea" on a particular stock may be contrary to the recommendations or views expressed in research on the same stock. This may be the result of differing time horizons, methodologies, market events, or other factors. For all research available on a particular stock, please contact your sales representative or go to Matrix at <http://www.morganstanley.com/matrix>. Morgan Stanley Research is provided to our clients through our proprietary research portal on Matrix and also distributed electronically by Morgan Stanley to clients. Certain, but not all, Morgan Stanley Research products are also made available to clients through third-party vendors or redistributed to clients through alternate electronic means as a convenience. For access to all available Morgan Stanley Research, please contact your sales representative or go to Matrix at <http://www.morganstanley.com/matrix>.

Any access and/or use of Morgan Stanley Research is subject to Morgan Stanley's Terms of Use (<http://www.morganstanley.com/terms.html>). By accessing and/or using Morgan Stanley Research, you are indicating that you have read and agree to be bound by our Terms of Use (<http://www.morganstanley.com/terms.html>). In addition you consent to Morgan Stanley processing your personal data and using cookies in accordance with our Privacy Policy and our Global Cookies Policy (http://www.morganstanley.com/privacy_pledge.html), including for the purposes of setting your preferences and to collect readership data so that we can deliver better and more personalized service and products to you. To find out more information about how Morgan Stanley processes personal data, how we use cookies and how to reject cookies see our Privacy Policy and our Global Cookies Policy (http://www.morganstanley.com/privacy_pledge.html).

If you do not agree to our Terms of Use and/or if you do not wish to provide your consent to Morgan Stanley processing your personal data or using cookies please do not access our research.

Morgan Stanley Research does not provide individually tailored investment advice. Morgan Stanley Research has been prepared without regard to the circumstances and objectives of those who receive it. Morgan Stanley recommends that investors independently evaluate particular investments and strategies, and encourages investors to seek the advice of a financial adviser. The appropriateness of an investment or strategy will depend on an investor's circumstances and objectives. The securities, instruments, or strategies discussed in Morgan Stanley Research may not be suitable for all investors, and

certain investors may not be eligible to purchase or participate in some or all of them. Morgan Stanley Research is not an offer to buy or sell or the solicitation of an offer to buy or sell any security/instrument or to participate in any particular trading strategy. The value of and income from your investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in securities/instruments transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. If provided, and unless otherwise stated, the closing price on the cover page is that of the primary exchange for the subject company's securities/instruments.

The fixed income research analysts, strategists or economists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality, accuracy and value of research, firm profitability or revenues (which include fixed income trading and capital markets profitability or revenues), client feedback and competitive factors. Fixed Income Research analysts', strategists' or economists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

The "Important US Regulatory Disclosures on Subject Companies" section in Morgan Stanley Research lists all companies mentioned where Morgan Stanley owns 1% or more of a class of common equity securities of the companies. For all other companies mentioned in Morgan Stanley Research, Morgan Stanley may have an investment of less than 1% in securities/instruments or derivatives of securities/instruments of companies and may trade them in ways different from those discussed in Morgan Stanley Research. Employees of Morgan Stanley not involved in the preparation of Morgan Stanley Research may have investments in securities/instruments or derivatives of securities/instruments of companies mentioned and may trade them in ways different from those discussed in Morgan Stanley Research. Derivatives may be issued by Morgan Stanley or associated persons.

With the exception of information regarding Morgan Stanley, Morgan Stanley Research is based on public information. Morgan Stanley makes every effort to use reliable, comprehensive information, but we make no representation that it is accurate or complete. We have no obligation to tell you when opinions or information in Morgan Stanley Research change apart from when we intend to discontinue equity research coverage of a subject company. Facts and views presented in Morgan Stanley Research have not been reviewed by, and may not reflect information known to, professionals in other Morgan Stanley business areas, including investment banking personnel.

Morgan Stanley Research personnel may participate in company events such as site visits and are generally prohibited from accepting payment by the company of associated expenses unless pre-approved by authorized members of Research management.

Morgan Stanley may make investment decisions that are inconsistent with the recommendations or views in this report.

To our readers based in Taiwan or trading in Taiwan securities/instruments: Information on securities/instruments that trade in Taiwan is distributed by Morgan Stanley Taiwan Limited ("MSTL"). Such information is for your reference only. The reader should independently evaluate the investment risks and is solely responsible for their investment decisions. Morgan Stanley Research may not be distributed to the public media or quoted or used by the public media without the express written consent of Morgan Stanley. Any non-customer reader within the scope of Article 7-1 of the Taiwan Stock Exchange Recommendation Regulations accessing and/or receiving Morgan Stanley Research is not permitted to provide Morgan Stanley Research to any third party (including but not limited to related parties, affiliated companies and any other third parties) or engage in any activities regarding Morgan Stanley Research which may create or give the appearance of creating a conflict of interest. Information on securities/instruments that do not trade in Taiwan is for informational purposes only and is not to be construed as a recommendation or a solicitation to trade in such securities/instruments. MSTL may not execute transactions for clients in these securities/instruments.

Certain information in Morgan Stanley Research was sourced by employees of the Shanghai Representative Office of Morgan Stanley Asia Limited for the use of Morgan Stanley Asia Limited.

Morgan Stanley is not incorporated under PRC law and the research in relation to this report is conducted outside the PRC. Morgan Stanley Research does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors shall have the relevant qualifications to invest in such securities and shall be responsible for obtaining all relevant approvals, licenses, verifications and/or registrations from the relevant governmental authorities themselves. Neither this report nor any part of it is intended as, or shall constitute, provision of any consultancy or advisory service of securities investment as defined under PRC law. Such information is provided for your reference only.

Morgan Stanley Research is disseminated in Brazil by Morgan Stanley C.T.V.M. S.A.; in Mexico by Morgan Stanley México, Casa de Bolsa, S.A. de C.V. which is regulated by Comision Nacional Bancaria y de Valores. Paseo de los Tamarindos 90, Torre 1, Col. Bosques de las Lomas Floor 29, 05120 Mexico City; in Japan by Morgan Stanley MUFG Securities Co., Ltd. and, for Commodities related research reports only, Morgan Stanley Capital Group Japan Co., Ltd; in Hong Kong by Morgan Stanley Asia Limited (which accepts responsibility for its contents) and by Morgan Stanley Asia International Limited, Hong Kong Branch; in Singapore by Morgan Stanley Asia (Singapore) Pte. (Registration number 199206298Z) and/or Morgan Stanley Asia (Singapore) Securities Pte Ltd (Registration number 200008434H), regulated by the Monetary Authority of Singapore (which accepts legal responsibility for its contents and should be contacted with respect to any matters arising from, or in connection with, Morgan Stanley Research) and by Morgan Stanley Asia International Limited, Singapore Branch (Registration number T11FC0207F); in Australia to "wholesale clients" within the meaning of the Australian Corporations Act by Morgan Stanley Australia Limited A.B.N. 67 003 734 576, holder of Australian financial services license No. 233742, which accepts responsibility for its contents; in Australia to "wholesale clients" and "retail clients" within the meaning of the Australian Corporations Act by Morgan Stanley Wealth Management Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813, which accepts responsibility for its contents; in Korea by Morgan Stanley & Co International plc, Seoul Branch; in India by Morgan Stanley India Company Private Limited; in Indonesia by PT. Morgan Stanley Sekuritas Indonesia; in Canada by Morgan Stanley Canada Limited, which has approved of and takes responsibility for its contents in Canada; in Germany by Morgan Stanley Bank AG, Frankfurt am Main and Morgan Stanley Private Wealth Management Limited, Niederlassung Deutschland, regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin); in Spain by Morgan Stanley, S.V., S.A., a Morgan Stanley group company, which is supervised by the Spanish Securities Markets Commission (CNMV) and states that Morgan Stanley Research has been written and distributed in accordance with the rules of conduct applicable to financial research as established under Spanish regulations; in the US by Morgan Stanley & Co. LLC, which accepts responsibility for its contents. Morgan Stanley & Co. International plc, authorized by the Prudential Regulatory Authority and regulated by the Financial Conduct Authority and the Prudential Regulatory Authority, disseminates in the UK research that it has prepared, and approves solely for the purposes of section 21 of the Financial Services and Markets Act 2000, research which has been prepared by any of its affiliates. RMB Morgan Stanley Proprietary Limited is a member of the JSE Limited and regulated by the Financial Services Board in South Africa. RMB Morgan Stanley Proprietary Limited is a joint venture owned equally by Morgan Stanley International Holdings Inc. and RMB Investment Advisory (Proprietary) Limited, which is wholly owned by FirstRand Limited. The information in Morgan Stanley Research is being disseminated by Morgan Stanley Saudi Arabia, regulated by the Capital Market Authority in the Kingdom of Saudi Arabia, and is directed at Sophisticated investors only.

Morgan Stanley Hong Kong Securities Limited is the liquidity provider/market maker for securities of Jiangxi Copper listed on the Stock Exchange of Hong Kong Limited. An updated list can be found on HKEx website: <http://www.hkex.com.hk>.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (DIFC Branch), regulated by the Dubai Financial Services Authority (the DFSA), and is directed at Professional Clients only, as defined by the DFSA. The financial products or financial services to which this research relates will only be made available to a customer who we are satisfied meets the regulatory criteria to be a Professional Client.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (QFC Branch), regulated by the Qatar Financial Centre Regulatory Authority (the QFCRA), and is directed at business customers and market counterparties only and is not intended for Retail Customers as defined by the QFCRA.

As required by the Capital Markets Board of Turkey, investment information, comments and recommendations stated here, are not within the scope of

investment advisory activity. Investment advisory service is provided exclusively to persons based on their risk and income preferences by the authorized firms. Comments and recommendations stated here are general in nature. These opinions may not fit to your financial status, risk and return preferences. For this reason, to make an investment decision by relying solely to this information stated here may not bring about outcomes that fit your expectations.

The trademarks and service marks contained in Morgan Stanley Research are the property of their respective owners. Third-party data providers make no warranties or representations relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages relating to such data. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and S&P.

Morgan Stanley Research, or any portion thereof may not be reprinted, sold or redistributed without the written consent of Morgan Stanley.

INDUSTRY COVERAGE: Greater China Materials

COMPANY (TICKER)	RATING (AS OF)	PRICE* (03/20/2017)
Han Fu		
Tianqi Lithium Industries Inc. (002466.SZ)	O (12/19/2015)	Rmb39.39
Lindsay Hu		
China Molybdenum (3993.HK)	O (11/03/2016)	HK\$2.89
China Molybdenum (603993.SS)	U (11/03/2016)	Rmb4.68
Rachel L Zhang		
Aluminum Corp. of China Ltd. (601600.SS)	E (03/14/2017)	Rmb4.83
Aluminum Corp. of China Ltd. (2600.HK)	O (03/14/2017)	HK\$3.94
Angang Steel Company Limited (0347.HK)	O (11/28/2013)	HK\$6.02
Angang Steel Company Limited (000898.SZ)	O (01/16/2016)	Rmb5.81
Baoshan Iron & Steel (600019.SS)	O (01/16/2016)	Rmb6.73
China Steel Corp. (2002.TW)	U (04/17/2015)	NT\$25.85
Jiangxi Copper (0358.HK)	E (10/08/2014)	HK\$13.08
Jiangxi Copper (600362.SS)	U (04/17/2015)	Rmb18.34
Lee & Man Paper Manufacturing (2314.HK)	O (07/20/2015)	HK\$6.29
Maanshan Iron & Steel (600808.SS)	O (03/14/2017)	Rmb3.36
Maanshan Iron & Steel (0323.HK)	O (01/16/2016)	HK\$3.06
Nine Dragons Paper (2689.HK)	O (04/13/2016)	HK\$8.57
Shandong Nanshan Aluminium Co. (600219.SS)	O (09/29/2015)	Rmb3.33
Sara Chan		
Shandong Gold Mining Co. Ltd (600547.SS)	E (03/16/2016)	Rmb35.97
Zhaojin Mining Industry (1818.HK)	O (01/20/2015)	HK\$7.53
Zhongjin Gold Corp. Ltd. (600489.SS)	E (03/14/2017)	Rmb12.09
Zijin Mining Group (601899.SS)	U (05/19/2016)	Rmb3.50
Zijin Mining Group (2899.HK)	E (12/13/2016)	HK\$3.09

Stock Ratings are subject to change. Please see latest research for each company.

* Historical prices are not split adjusted.